

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Application Review

Issue Date: **TBD**

Region: Mooresville Regional Office
County: Catawba
NC Facility ID: 1800102
Inspector's Name: Jennifer Womick
Date of Last Inspection: 08/31/2017
Compliance Code: 3 / Compliance - inspection

Facility Data Applicant (Facility's Name): Heritage Home Group LLC - Hickory Chair Facility Address: Heritage Home Group LLC - Hickory Chair 37 9th Street PI SE Hickory, NC 28602 SIC: 2512 / Upholstered Household Furniture NAICS: 337121 / Upholstered Household Furniture Manufacturing Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V				Permit Applicability (this application only) SIP: 02D: .0504, .0512, .0516, .0521, .0530, .1111, .1806 02Q: .0317 NSPS: n/a NESHAP: ZZZZ, JJJJJJ, OOOOOO PSD: Use of Actual Emissions PSD Avoidance: n/a NC Toxics: n/a 112(r): n/a Other: MACT Avoidance			
Contact Data				Application Data			
Facility Contact Donna Musick Environmental Coordinator (828) 328-1802 37 9th Street Place SE Hickory, NC 28602	Authorized Contact Tim Atkins Plant Manager (828) 328-1802 37 9th Street Place SE Hickory, NC 28602	Technical Contact Donna Musick Environmental Coordinator (828) 328-1802 37 9th Street Place SE Hickory, NC 28602	Application Number: 1800102.18A Date Received: 02/15/2018 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 02779/T24 Existing Permit Issue Date: 03/06/2014 Existing Permit Expiration Date: 11/30/2018				
Total Actual emissions in TONS/YEAR:							
CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2016	0.2300	4.95	67.22	5.90	4.19	4.78	3.50 [Toluene]
2015	0.2500	5.20	77.54	6.14	4.56	5.74	3.80 [Toluene]
2014	2.67	9.67	92.77	11.00	7.50	6.48	4.18 [Toluene]
2013	3.27	9.79	90.13	11.04	7.50	5.91	3.79 [Toluene]
2012	2.41	6.37	89.72	6.96	4.83	4.99	3.49 [Toluene]
Review Engineer: Russell Braswell Review Engineer's Signature: _____ Date: _____				Comments / Recommendations: Issue 02779/T25 Permit Issue Date: TBD Permit Expiration Date: TBD			

1. Purpose of Application:

Heritage Home Group, LLC - Hickory Chair (Hickory Chair) operates a furniture manufacturing facility under Title V Air Quality Permit 02779T24. This permit is currently set to expire November 30, 2018. Hickory Chair submitted this application in order to renew the permit and also correct minor typos throughout the existing permit. Because this application was received at least nine months before the expiration date of the existing permit, the existing permit will remain in effect, regardless of the expiration date, until this application is processed.

2. Facility Description:

According to Jennifer Womick's inspection report (dated August 31, 2017), this facility "manufactures, assembles, and finishes upholstered case goods furniture. The facility currently operates 9 hours a day on Monday through Thursday and a half-day Friday, but they sometimes work on Saturday as demand requires. This facility currently employs almost 500 people."

3. History/Background Since the Previous Permit Renewal:

- December 23, 2013 Permit T23 issued. This action renewed the permit, allowed for burning of natural gas and No. 2 oil in boiler OFB, and added an avoidance condition for HAP-Major status.
- March 6, 2014 Permit T24 issued. This action changed the name on the permit and made several minor corrections.

4. Application Chronology:

- February 23, 2018 Application received in Central Office.
- March 27, 2018 Phone call with Hickory Chair (Donna Musick, Chris Farabee) regarding changes based on the removal of the "Once in Always in" policy.
- April 6, 2018 Email sent to Donna Musick regarding minor changes and corrections to the permit.
- April 13, 2018 An initial draft of the permit and technical review were sent to DAQ staff (Tom Anderson, Mark Cuilla, Samir Parekh, Jennifer Womick, Denise Hayes) and Hickory Chair staff (Donna Musick). For a summary of comments received, see Attachment 2.
- XXXXX Public / EPA notice
- XXXXX Permit issued.

5. Permit Modifications/Changes and TVEE Discussion:

- All specific conditions for MACT Subpart JJ and DDDD have been removed from the permit. See Section 7 for details. (note that these rules are still mentioned in 02Q .0317)
- A permit condition for MACT Subpart OOOOOO has been added to the permit.

- Monitoring and recordkeeping for HAP-Major Avoidance has been corrected to 12-month rolling total instead of average.
- Visible emission monitoring has been reduced to monthly at the facility's and regional office's request.
- References to No. 5/6 fuel oil have been removed from the permit at the facility's request.

See Attachment 1 for a complete list of changes.

6. Regulatory Overview:

Hickory Chair is subject to the following State Implementation Plan (SIP) and Federal regulations, in addition to the requirements in the General Conditions:

- 15A NCAC 02D .0504 "Particulates from Wood Burning Indirect Heat Exchangers"
- 15A NCAC 02D .0512 "Particulates from Wood Products Finishing Plants"
- 15A NCAC 02D .0516 "Sulfur Dioxide from Combustion Sources"
- 15A NCAC 02D .0521 "Control of Visible Emissions"
- 15A NCAC 02D .0530 "Prevention of Significant Deterioration"
(Use of Projected Actual Emissions)
- 15A NCAC 02D .1111 "Maximum Achievable Control Technology"
(40 CFR Part 63, Subparts ZZZZ, JJJJJ, OOOOOO)
- 15A NCAC 02D .1806 "Control and Prohibition of Odorous Emissions"
- 15A NCAC 02Q .0317 "Avoidance Conditions"
(HAP-Major Avoidance)

An extensive review for the following applicable regulations is not included in this document: 02D .0504, .0512, .0516, and .1806. The facility's status with respect to these regulations has not changed. The permit will be updated to reflect the most current stipulations for all applicable regulations.

For a review of permit changes and an explanation of rules included (or not included) in the permit, see Section 7, below.

7. Rules Review

a. New Source Performance Standards (NSPS; 40 CFR Part 60)

1. Subpart Dc "Small Industrial-Commercial-Institutional Steam Generating Units"

This rule applies to boilers with heat input rates less than 100 million BTU per hour and that were constructed/reconstructed/modified after 1989. Each of the boilers at this facility were constructed before that date and have not undergone any reconstruction or modification per the definition in the rule. Therefore, this rule does not apply to this facility.

2. Subpart IIII "Stationary Compression Ignition Internal Combustion Engines"

This rule applies to stationary compression ignition engines installed after July 11, 2005. The emergency generator at this facility was installed before that date, so this rule does not apply.

b. Maximum/Generally Available Control Technology (MACT/GACT; 40 CFR Part 63)

1. *02Q.0317 "Avoidance Conditions" (HAP-Major Avoidance)*

This facility is considered an Area Source for hazardous air pollutant (HAP) emissions. This facility maintains this designation by complying with an enforceable facility-wide emission limit for HAPs. The limits are a) less than 10 tons of any individual HAP, and b) less than 25 tons of total HAP.

In order to demonstrate compliance with the avoidance limit, the facility must calculate HAP emissions from the furniture finishing operations and boilers. The facility must keep records of the rolling 12-month total HAP emissions and report this twice per year.

The existing permit requires reporting of the "rolling 12-month average" HAP emissions. This has been corrected to "total" in the new permit.

Based on the most recent inspection, Hickory Chair appears to be in compliance with this rule. Continued compliance will be determined with subsequent inspections and reports.

Note that because of this avoidance condition, this facility is classified as an Area Source for HAP emissions. Therefore, rules that apply specifically to Major Sources (e.g. Subpart JJ) do not apply to this facility.

2. *Subpart JJ "Wood Furniture Manufacturing Operations" and Subpart DDDD "Plywood and Composite Wood Products"*

These rules only apply to HAP-Major Sources. This facility had previously been classified as a HAP-Major Source, triggering applicability for these rules. Based on EPA's memo from May 16, 1995, triggering applicability for these rules meant that these rules would apply in perpetuity, regardless of major source status (a.k.a "once in, always in", or "OIAI"). Therefore, this facility remained subject to these rules even after the facility accepted an operating limit to be considered an Area Source.

EPA reversed the OIAI policy in a memo dated January 25, 2018. Based on this new policy, neither of these rules applies to this facility. Therefore, references to these rules have been removed from the permit.

3. *Subpart ZZZZ "Stationary Reciprocating Internal Combustion Engines"*

This rule applies to all stationary internal combustion engines.

The requirements of this rule depend on several factors: engine capacity, manufacture date, HAP-Major/Minor, etc. For the purposes of this rule, all of the engines at this facility are:

- a) Existing;
- b) HAP-Minor;
- c) Emergency use;
- d) Between 100 and 500 horsepower;
- e) Diesel-fired/compression ignition; and
- f) Uncontrolled.

For these engines, the general requirements of the rule are to perform regular maintenance and oil changes and to operate according to manufacturer's specifications. The facility is expected to continue to comply with this rule.

Note that, for this facility, this rule only applies to sources on the list of insignificant activities. Therefore, there will not be a permit condition for this rule. Nevertheless, Hickory Chair must still comply with this rule.

Based on the most recent inspection, Hickory Chair appears to be in compliance with this rule. Continued compliance will be determined with subsequent inspections.

4. *Subpart JJJJJJ "Industrial, Commercial, and Institutional Boilers Area Sources"*

This rule applies to boilers that burn non-gas fuels and are located at HAP-Area sources. Both boilers at this facility are subject to this rule.

Under this rule, the boilers are considered existing biomass (WFB-1) or light-liquid-fired (OFB). In general, the requirements for these sources are:

- Operate with good work-practices;
- Conduct an initial and biennial tune-up;
- Conduct an initial energy assessment;
- Keep records of tune-ups and maintenance; and
- Submit reports regularly.

The permit condition for this rule has been updated to indicate initial compliance dates. These changes do not change the facility's general compliance requirements or ability to comply with them.

Based on the most recent inspection, Hickory Chair appears to be in compliance with this rule. Continued compliance will be determined with subsequent inspections.

Note that this rule allows for oil-fired boilers to be considered as gas-fired boilers if the boiler only burns oil during periods of gas curtailment. If the facility accepts this restriction, Subpart JJJJJJ would not apply. In an April 9, 2018 email, Donna Musick stated that this facility was not interested in the gas curtailment restriction.

5. *Subpart HHHHHH "Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources"*

This rule applies to HAP-Area Sources that perform "Spray application of coatings containing...to any part or product made of metal or plastic, or combinations of metal and plastic." This facility manufactures wood furniture and does not spray coatings onto metal/plastic surfaces. Therefore, this rule does not apply to this facility.

6. *Subpart OOOOOO "Flexible Polyurethane Foam Production and Fabrication Area Sources"*

This rule applies to HAP-Area Sources "where adhesives are used to bond [polyurethane] foam to foam or other substrates."

In an April 12, 2018 email, Donna Musick stated that the upholstering operation receives pre-cut and pre-fabricated foam cushions, and doesn't "glue cushions to seat boards, etc." However, the

facility must occasionally perform minor repairs to the cushions using glue. This rule appears to make no exceptions – any facility that uses adhesives to bond foam to anything is subject to this rule.

Based on the definitions in this rule, the upholstering operation at this facility is considered a flexible polyurethane foam fabrication source. The only compliance requirement for this source is to not use any adhesive containing methylene chloride in the upholstering process. The facility can show compliance with this rule using the MSDSs of any adhesives.

The rule has no specific compliance requirements for this facility. The only potentially applicable compliance requirements are for fabrication sources that also operate a "loop slitter". According to the above-mentioned email, this facility does not operate a loop slitter, and does not use any adhesives containing methylene chloride.

Hickory Chair appears to be in compliance with this rule. Continued compliance will be determined with subsequent inspections.

c. Prevention of Significant Deterioration (PSD)

This facility is considered a PSD-Minor Source. The facility has not been reviewed for PSD purposes, and is not avoiding triggering a PSD review.

The T23 permit (application .13A) added the ability to fire gas and No. 2 oil in boiler OFB. The facility used the "projected actual emissions" option to demonstrate that this change would not trigger a PSD review. In order to demonstrate continued compliance, this facility must report the annual use of No. 2 oil in the boiler and compare it against the projections used in the .13A review. This report is required for 10 years following the date the facility completed the physical modification of the boiler.

Based on a phone call with Donna Musick on March 27, 2018, the facility completed the gas upgrade in CY2015. Therefore, reporting will be required until CY2025. These dates have been added to the permit.

Based on the most recent inspection report, the facility appears to be in compliance with this rule. Continued compliance will be determined with subsequent reports and inspections.

d. Section 112(r) of the Federal Clean Air Act

The facility does not appear to store any 112(r)-subject materials above their respective thresholds. Therefore, the facility does not have any increased requirements under Section 112(r) of the Clean Air Act.

e. Reasonably Available Control Technology (RACT)

As of the issuance of this permit, this facility is not located in an area of ozone nonattainment, therefore RACT does not apply.

f. Compliance Assurance Monitoring (CAM)

CAM applies to a control device if the following criteria are met:

1. The unit being controlled is subject to a non-exempt emission standard (as defined by 2D .0614(b)(1)),

2. The control device is being used to comply with the emission standard, and
3. The unit being controlled has potential emissions of the pollutant subject to the emission standard of greater than major source thresholds.

The only control devices used at the facility are for particulate matter (PM). No sources at this facility have PM emissions greater than the major source threshold, so CAM does not apply.

g. Other SIP Rules

1. 02D .0521 "Control of Visible Emissions"

This rule limits visible emissions from non-fugitive sources. Both the regional office inspector and the facility requested that monitoring associated with this rule be reduced to monthly, based on the extensive compliance history with this facility.

Based on the most recent inspection report, the facility appears to be in compliance with this rule. Continued compliance will be determined during subsequent inspections.

8. Toxic Air Pollutants (TAPs)

This facility has not been reviewed for TAP emissions. It should be noted that previously this facility was subject to MACT Subpart JJ. Facilities subject to this rule are specifically exempted from TAP emission requirements per 02Q .0702(a)(23). Removing the MACT from the permit does not constitute a modification, so no TAP review is required for this application.

Because the facility is no longer subject to MACT Subpart JJ, any future modification may trigger a review of TAP emissions.

9. Facility Emissions Review

This permit renewal is not expected to change potential emissions from the facility.

For a historical review of actual emissions from the facility, see the summary table on the first page of this review.

10. Compliance Status

- a. Notices of Violation/Recommendation for Enforcement since the previous renewal

None.

- b. Inspection status

The facility was most recently inspected by Jennifer Womick on August 31, 2017. Hickory Chair appeared to be in compliance with the Title V permit at the time of that inspection.

11. Other Regulatory Concerns

A PE seal was not required for this permit renewal.

A zoning consistency form was not required for this permit renewal.

12. Public Notice/EPA and Affected State(s) Review

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Consistent with 15A NCAC 02Q .0525, the EPA will have a concurrent 45-day review period. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to EPA. Also, pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice is provided to the public under 02Q .0521 above. Forsyth County is an affected local program within 50 miles of the facility.

13. Recommendations

Issue permit 02779T25.

ATTACHMENT 1 to Review of Application 1800102.18A
Heritage Home Group, LLC - Hickory Chair

Change List

Insert change list from final permit

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ATTACHMENT 2 to Review of Application 1800102.18A
Heritage Home Group, LLC - Hickory Chair

Comments Received on Initial Draft

- Mark Cuilla, by email on April 18, 2018
 1. Mark pointed out typos in the permit and review.

Response: These issues have been fixed.

- Donna Musick, by email on April 24, 2018
 1. Donna pointed out typos in the permit and review.

Response: These issues have been fixed.

- Denise Hayes, by email on April 26, 2018
 1. Denise pointed out a typo in the permit.

Response: This issue has been fixed.

DRAFT